

Safety Data Sheet



Section 1: Identification of the Substance/Mixture and of the Company/Undertaking

1.1 Product identifier

- Product Name** • **Component Primers and Percussion Caps (Centerfire/Shotshell/Muzzleload)**
- Synonyms** • Centerfire Pistol / Revolver Component Primers; Centerfire Rifle Component Primers; Muzzleloading Component Primers; Shotshell Component Primers
- SDS Number/Grade** • CFSSPRIM

1.2 Relevant identified uses of the substance or mixture and uses advised against

- Relevant identified use(s)** • Handloading/Reloading or Muzzleloading

1.3 Details of the supplier of the safety data sheet

- Manufacturer** • Remington Arms
2592 AR HWY 15 N
Lonoke, AR 72086
United States
www.remington.com

Telephone (General) • 501-676-3161

1.4 Emergency telephone number

- Manufacturer** • (800) 424-9300 - CHEMTREC
- Manufacturer** • 501-676-3161 - Company Emergency Telephone Number

Section 2: Hazards Identification

EU/EEC

According to: Regulation (EC) No 1272/2008 (CLP)/REACH 1907/2006 [amended by 453/2010]

2.1 Classification of the substance or mixture

- CLP** • Explosives 1.4 - H204
Specific Target Organ Toxicity Single Exposure 3: Respiratory Tract Irritation - H335
Reproductive Toxicity 1A - H360Df

2.2 Label Elements

CLP

DANGER



- Hazard statements** • H204 - Fire or projection hazard
 H335 - May cause respiratory irritation
 H360Df - May damage the unborn child. Suspected of damaging fertility.

Precautionary statements

- Prevention** • P201 - Obtain special instructions before use.
 P202 - Do not handle until all safety precautions have been read and understood.
 P210 - Keep away from heat, sparks, open flames and/or hot surfaces. - No smoking.
 P240 - Ground and/or bond container and receiving equipment.
 P250 - Do not subject to grinding/shock/friction.
 P261 - Avoid breathing dust or fume.
 P271 - Use only outdoors or in a well-ventilated area.
 P280 - Wear protective gloves/protective clothing/eye protection/face protection.
 P281 - Use personal protective equipment as required.

- Response** • P370+P380 - In case of fire: Evacuate area.
 P373 - DO NOT fight fire when fire reaches explosives.
 P374 - Fight fire with normal precautions from a reasonable distance.
 P304+P340 - IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.
 P312 - Call a POISON CENTER or doctor/physician if you feel unwell.
 P308+P313 - IF exposed or concerned: Get medical advice/attention.

- Storage/Disposal** • P401 - Store in accordance with local, regional, national, and/or international regulations.
 P403+P233 - Store in a well-ventilated place. Keep container tightly closed.
 P405 - Store locked up.
 P501 - Dispose of content and/or container in accordance with local, regional, national, and/or international regulations.

2.3 Other Hazards

- CLP**
- Heating above the melting point releases metallic oxides which may cause metal fume fever by inhalation. The symptoms are shivering, fever, malaise and muscular pain. Exposure to antimony can cause what are known as antimony spots which is a rash characterized by papules and pustules that resembles chicken pox. According to Regulation (EC) No. 1272/2008 (CLP) this material is considered hazardous.

United States (US)

According to: OSHA 29 CFR 1910.1200 HCS

2.1 Classification of the substance or mixture

- OSHA HCS 2012**
- Explosives 1.4
 Specific Target Organ Toxicity Single Exposure 3: Respiratory Tract Irritation
 Reproductive Toxicity 1A
 Hazards Not Otherwise Classified - Health Hazards - Metal fume fever; Causes antimony spots

2.2 Label elements

OSHA HCS 2012

DANGER



- Hazard statements** • Fire or projection hazard
 May cause respiratory irritation
 May damage fertility or the unborn child.

Precautionary statements

- Prevention**
- Obtain special instructions before use.
 - Do not handle until all safety precautions have been read and understood.
 - Keep away from heat, sparks, open flames and/or hot surfaces. - No smoking.
 - Ground and/or bond container and receiving equipment.
 - Do not subject to grinding/shock/friction.
 - Avoid breathing dust or fume.
 - Use only outdoors or in a well-ventilated area.
 - Wear protective gloves/protective clothing/eye protection/face protection.
- Response**
- In case of fire: Evacuate area.
 - DO NOT fight fire when fire reaches explosives.
 - Fight fire with normal precautions from a reasonable distance.
 - IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.
 - Call a POISON CENTER or doctor/physician if you feel unwell.
 - IF exposed or concerned: Get medical advice/attention.
- Storage/Disposal**
- Store in accordance with local, regional, national, and/or international regulations.
 - Store in a well-ventilated place. Keep container tightly closed.
 - Store locked up.
 - Dispose of content and/or container in accordance with local, regional, national, and/or international regulations.

2.3 Other hazards

OSHA HCS 2012

- Heating above the melting point releases metallic oxides which may cause metal fume fever by inhalation. The symptoms are shivering, fever, malaise and muscular pain. Exposure to antimony can cause what are known as antimony spots which is a rash characterized by papules and pustules that resembles chicken pox. Under United States Regulations (29 CFR 1910.1200 - Hazard Communication Standard), this product is considered hazardous.

Section 3 - Composition/Information on Ingredients

3.1 Substances

- Material does not meet the criteria of a substance.

3.2 Mixtures

Composition					
Chemical Name	Identifiers	%	LD50/LC50	Classifications According to Regulation/Directive	Comments
Iron oxide	CAS:1309-37-1 EC Number:215-168-2	0% TO 98%	NDA	EU CLP: Not Classified OSHA HCS 2012: Not Classified	NDA
Copper	CAS:7440-50-8 EC Number:231-159-6	1% TO 67%	NDA	EU CLP: STOT SE 3: Resp. Irrit., H335 OSHA HCS 2012: Comb. Dust; STOT SE 3: Resp. Irrit.	NDA
	CAS:7440-66-				

Zinc	6 EC Number: 231-175-3 EU Index: 030-001-00-1	1% TO 29%	NDA	EU CLP: Not Classified OSHA HCS 2012: Comb. Dust; Hazard Not Otherwise Classified - Health Hazard - Metal fume fever	NDA
Barium	CAS: 7440-39-3 EINECS: 231-149-1	0% TO 29%	NDA	EU CLP: Not Classified OSHA HCS 2012: Comb. Dust	NDA
2,4,6-Trinitro-1,3-benzenediol lead salt	CAS: 15245-44-0 EC Number: 239-290-0	0% TO 26%	NDA	EU CLP: Annex VI, Table 3.1: Expl. 1.1, H201; Repr. 1A, H360df; Acute Tox. 4, H332; Acute Tox. 4, H302; STOT RE 2, H373; Aquatic Acute 1. H400; Aquatic Chronic 1, H410 OSHA HCS 2012: Expl. 1.1; Repr. 1A; STOT RE 1 (Liver, Kidney, Blood, Nervous System)	NDA
Antimony	CAS: 7440-36-0 EINECS: 231-146-5	0.3% TO 7.8%	Ingestion/Oral- Rat LD50 • 100 mg/kg	EU CLP: Acute Tox. 3, H301; Repr. 2, H361d (Derm, Inhl); STOT RE 2, H373 (Lungs, Inhl); Aquatic Chronic 2, H411 OSHA HCS 2012: Comb. Dust; Acute Tox. 3 (Orl); Repr. 2 (Derm, Inhl); STOT RE 2 (Lungs, Inhl); Hazard Not Otherwise Classified - Health Hazard - Causes Antimony spots	NDA
Guanyl nitrosaminoguanyltetrazene	CAS: 109-27-3 EINECS: 203-659-4	0.1% TO 3.3%	NDA	EU CLP: Not Classified OSHA HCS 2012: Not Classified	NDA
Arsenic	CAS: 7440-38-2 EC Number: 231-148-6 EU Index: 033-001-00-X	< 0.1%	Ingestion/Oral- Rat LD50 • 763 mg/kg	EU CLP: Community Workplace Exposure Limits OSHA HCS 2012: Exposure Limits	NDA

See Section 16 for full text of H-statements.

Section 4 - First Aid Measures

4.1 Description of first aid measures

Inhalation

- First aid is not expected to be necessary if material is used under ordinary conditions and as recommended. If signs/symptoms develop, move person to fresh air. Administer oxygen if breathing is difficult. Give artificial respiration if victim is not breathing. If signs/symptoms continue, get medical attention.

Skin

- First aid is not expected to be necessary if material is used under ordinary conditions and as recommended. Wash skin with soap and water. If signs/symptoms develop, get medical attention.

Eye

- First aid is not expected to be necessary if material is used under ordinary conditions and as recommended. Remove contact lenses if worn. Flush eyes with water for at least 15 minutes. If signs/symptoms develop, get medical attention.

Ingestion

- First aid is not expected to be necessary if material is used under ordinary conditions and as recommended. Give plenty of water to drink. Induce vomiting (only in conscious persons) Never give anything by mouth to an unconscious person. Call a physician or poison control center immediately.

4.2 Most important symptoms and effects, both acute and delayed

- Refer to Section 11 - Toxicological Information.

4.3 Indication of any immediate medical attention and special treatment needed

Notes to Physician

- No specific actions or treatments recommended related to exposure to this material.

Section 5 - Firefighting Measures

5.1 Extinguishing media

Suitable Extinguishing Media • Water, carbon dioxide, dry chemical, earth.

Unsuitable Extinguishing Media • No data available.

5.2 Special hazards arising from the substance or mixture

Unusual Fire and Explosion Hazards • May ignite if heated above 130°C.
Will ignite when exposed to flame and high temperatures.
Be cautious of low-energy fragments.
Packages bearing the 1.4S label or packages containing material classified as 1.4S are designed or packaged in such a manner that when involved in a fire, may burn vigorously with localized detonations and projection of fragments.
Effects are usually confined to immediate vicinity of packages.

Hazardous Combustion Products • No data available

5.3 Advice for firefighters

- Wear positive pressure self-contained breathing apparatus (SCBA). Structural firefighters' protective clothing will only provide limited protection. Evacuate area.
Flood fire with water to fight fire and cool shells. If no water is available, use carbon dioxide, dry chemical or earth.
Fight fire with normal precautions from a reasonable distance.

Section 6 - Accidental Release Measures

6.1 Personal precautions, protective equipment and emergency procedures

Personal Precautions • Do not walk through spilled material. Do not strike or crush the rounds.

Emergency Procedures • Eliminate all ignition sources. If fire threatens cargo area containing packages bearing the 1.4S label or packages containing material classified as 1.4S, consider isolating at least 15 meters (50 feet) in all directions. In fire situations move people out of line of site of the scene and away from windows. Use normal clean up procedures.

6.2 Environmental precautions

- No special environmental precautions necessary.

6.3 Methods and material for containment and cleaning up

Containment/Clean-up Measures • Use clean nonsparking tools to collect material.
Carefully shovel or sweep up spilled material and place in suitable container.

6.4 Reference to other sections

- Refer to Section 8 - Exposure Controls/Personal Protection and Section 13 - Disposal Considerations.

Section 7 - Handling and Storage

7.1 Precautions for safe handling

Handling

- Handle with care. Do not strike or crush the rounds. Avoid breathing dust or fume. Use personal protective equipment as required. Wash thoroughly with soap and water after handling and before eating, drinking, or using tobacco.

7.2 Conditions for safe storage, including any incompatibilities

Storage

- Keep only in the original container. Store in a cool, dry, well-ventilated place. Keep away from sources of ignition – No Smoking. Do not subject to mechanical shock. Keep out of reach of children. This product must not be stored with acids, strong oxidizers or caustics.

7.3 Specific end use(s)

- Refer to Section 1.2 - Relevant identified uses.

Section 8 - Exposure Controls/Personal Protection

8.1 Control parameters

Exposure Limits/Guidelines					
	Result	ACGIH	Germany DFG	NIOSH	OSHA
Iron oxide (1309-37-1)	TWAs	5 mg/m3 TWA (respirable fraction)	Not established	5 mg/m3 TWA (dust and fume, as Fe)	10 mg/m3 TWA (fume); 15 mg/m3 TWA (total dust, listed under Rouge); 5 mg/m3 TWA (respirable fraction, listed under Rouge)
Barium (7440-39-3)	TWAs	0.5 mg/m3 TWA	Not established	Not established	Not established
Arsenic (7440-38-2)	TWAs	0.01 mg/m3 TWA	Not established	Not established	Not established
	Ceilings	Not established	Not established	0.002 mg/m3 Ceiling (15 min)	Not established
Antimony	TWAs	0.5 mg/m3 TWA	Not established	0.5 mg/m3 TWA	0.5 mg/m3 TWA
Copper (7440-50-8)	TWAs	0.2 mg/m3 TWA (fume)	Not established	1 mg/m3 TWA (dust and mist); 0.1 mg/m3 TWA (fume)	0.1 mg/m3 TWA (fume); 1 mg/m3 TWA (dust and mist)
	Ceilings	Not established	0.02 mg/m3 Peak (respirable fraction)	Not established	Not established
	MAKs	Not established	0.01 mg/m3 TWA MAK (including inorganic copper compounds, respirable fraction)	Not established	Not established
Zinc (7440-66-6)	Ceilings	Not established	0.4 mg/m3 Peak (respirable fraction); 4 mg/m3 Peak (inhalable fraction)	Not established	Not established
	MAKs	Not established	0.1 mg/m3 TWA MAK (respirable fraction); 2 mg/m3 TWA MAK (inhalable fraction)	Not established	Not established

Exposure Control Notations

ACGIH

- Barium (7440-39-3): **Carcinogens:** (A4 - Not Classifiable as a Human Carcinogen)
- Arsenic (7440-38-2): **Carcinogens:** (A1 - Confirmed Human Carcinogen)
- Iron oxide (1309-37-1): **Carcinogens:** (A4 - Not Classifiable as a Human Carcinogen)

Germany DFG

- Copper (7440-50-8): **Pregnancy:** (no risk to embryo/fetus if exposure limits adhered to)
- Zinc (7440-66-6): **Pregnancy:** (no risk to embryo/fetus if exposure limits adhered to (respirable fraction); no risk to embryo/fetus if exposure limits adhered to (inhalable fraction))
- Antimony (7440-36-0): **Carcinogens:** (Category 2 (considered to be carcinogenic for man))
- Arsenic (7440-38-2): **Carcinogens:** (Category 1 (causes cancer in man))

- Iron oxide (1309-37-1): **Carcinogens:** (Category 3B (could be carcinogenic for man, with the exception of non-bioavailable ferrous oxides))

Exposure Limits Supplemental

ACGIH

- Copper (7440-50-8): **TLV Basis - Critical Effects:** (metal fume fever (fume))
- Copper as Copper compounds: **TLV Basis - Critical Effects:** (gastrointestinal (dust and mist); irritation (dust and mist))
- Barium (7440-39-3): **TLV Basis - Critical Effects:** (eye, gastrointestinal and skin irritation; muscular stimulation)
- Antimony (7440-36-0): **TLV Basis - Critical Effects:** (skin and upper respiratory tract irritation)
- Antimony as Antimony compounds: **TLV Basis - Critical Effects:** (skin and upper respiratory tract irritation)
- Arsenic (7440-38-2): **BEIs:** (35 µg As/L Medium: urine Time: end of workweek Parameter: Inorganic arsenic plus methylated metabolites (background)) | **TLV Basis - Critical Effects:** (lung cancer)
- Iron oxide (1309-37-1): **TLV Basis - Critical Effects:** (pneumoconiosis)

8.2 Exposure controls

Engineering Measures/Controls

- Good general ventilation should be used. Ventilation rates should be matched to conditions. If applicable, use process enclosures, local exhaust ventilation, or other engineering controls to maintain airborne levels below recommended exposure limits. If exposure limits have not been established, maintain airborne levels to an acceptable level.

Personal Protective Equipment

Respiratory

- Follow the OSHA respirator regulations found in 29 CFR 1910.134 or European Standard EN 149. Use a NIOSH/MSHA or European Standard EN 149 approved respirator if exposure limits are exceeded or symptoms are experienced.

Eye/Face

- Wear safety glasses.

Skin/Body

- Wear protective clothing

Environmental Exposure Controls

- Controls should be engineered to prevent release to the environment, including procedures to prevent spills, atmospheric release and release to waterways. Follow best practice for site management and disposal of waste.

Additional Protection Measures

- Hearing protection recommended when firing rounds.

Key to abbreviations

ACGIH = American Conference of Governmental Industrial Hygiene

OSHA = Occupational Safety and Health Administration

MAK = Maximale Arbeitsplatz Konzentration is the maximum permissible concentration

TLV = Threshold Limit Value determined by the American Conference of Governmental Industrial Hygienists (ACGIH)

NIOSH = National Institute of Occupational Safety and Health

TWA = Time-Weighted Averages are based on 8h/day, 40h/week exposures

Section 9 - Physical and Chemical Properties

9.1 Information on Physical and Chemical Properties

Material Description			
Physical Form	Solid	Appearance/Description	Brass, Copper, and/or Silver/Gray solid with no odor.
Color	Brass, Copper, and/or Silver/Gray.	Odor	No odor.
Odor Threshold	Data lacking		
General Properties			
Boiling Point	Data lacking	Melting Point/Freezing Point	38 to 204 °C(100.4 to 399.2 °F)
Decomposition Temperature	93.3 °C(199.94 °F)	pH	Not relevant
Specific Gravity/Relative Density	Data lacking	Water Solubility	Negligible < 0.1 %
Viscosity	Data lacking	Explosive Properties	Data lacking
Oxidizing Properties:	Data lacking		
Volatility			

Vapor Pressure	Data lacking	Vapor Density	Data lacking
Evaporation Rate	Data lacking		
Flammability			
Flash Point	121 °C(249.8 °F)	UEL	Data lacking
LEL	Data lacking	Autoignition	Data lacking
Flammability (solid, gas)	Data lacking		
Environmental			
Octanol/Water Partition coefficient	Data lacking		

9.2 Other Information

- No additional physical and chemical parameters noted.

Section 10: Stability and Reactivity

10.1 Reactivity

- No dangerous reaction known under conditions of normal use.

10.2 Chemical stability

- Stable under normal temperatures and pressures.

10.3 Possibility of hazardous reactions

- Hazardous polymerization will not occur.

10.4 Conditions to avoid

- Flames, sparks, percussion, shock, static, high temperatures (266°F or 130°C, or above)

10.5 Incompatible materials

- Acids, strong oxidizers, caustics

10.6 Hazardous decomposition products

- No data available.

Section 11 - Toxicological Information

11.1 Information on toxicological effects

		Components
Copper (1% TO 67%)	7440-50-8	<p>Acute Toxicity: Ingestion/Oral-Mouse TDLo • 108 mg/kg; <i>Behavioral:Tremor</i>; <i>Gastrointestinal:Hypermotility, diarrhea</i>; <i>Gastrointestinal:Nausea or vomiting</i>; Ingestion/Oral-Mouse TDLo • 158 mg/kg; <i>Kidney, Ureter, and Bladder:Changes in tubules (including acute renal failure, acute tubular necrosis)</i>; Ingestion/Oral-Mouse TDLo • 232 mg/kg; <i>Kidney, Ureter, and Bladder:Changes primarily in glomeruli</i>; <i>Blood:Changes in spleen</i>; <i>Blood:Changes in serum composition (e.g., TP, bilirubin cholesterol)</i>;</p> <p>Multi-dose Toxicity: Ingestion/Oral-Rabbit TDLo • 3 g/kg 60 Day(s)-Continuous; <i>Cardiac:Other changes</i>; <i>Liver:Hepatitis (hepatocellular necrosis), zonal</i>; <i>Related to Chronic Data:Death in the Other Multiple Dose data type field</i>;</p> <p>Reproductive: Ingestion/Oral-Rat TDLo • 1520 µg/kg (22W pre); <i>Reproductive Effects:Specific Developmental Abnormalities:Musculoskeletal system</i>; Ingestion/Oral-Rat TDLo • 152 mg/kg (22W pre); <i>Reproductive Effects:Effects on Embryo or Fetus:Fetotoxicity (except death, e.g., stunted fetus)</i>; <i>Reproductive Effects:Specific Developmental Abnormalities:Central nervous system</i>; Ingestion/Oral-Rat TDLo • 1210 µg/kg (35W pre); <i>Reproductive Effects:Effects on Fertility:Pre-implantation mortality</i>; <i>Reproductive Effects:Effects on Fertility:Post-implantation mortality</i>;</p> <p>Tumorigen / Carcinogen: Ingestion/Oral-Mouse TDLo • 10.08 mg/kg 12 Week(s)-Continuous; <i>Tumorigenic:Carcinogenic by RTECS criteria</i>; <i>Lungs, Thorax, or Respiration:Other changes</i></p>
Zinc (1% TO 29%)	7440-66-6	<p>Irritation: Skin-Human • 300 µg 3 Day(s)-Intermittent • Mild irritation;</p> <p>Tumorigen / Carcinogen: Ingestion/Oral-Mouse TDLo • 12.6 mg/kg 46 Week(s)-Continuous; <i>Tumorigenic:Carcinogenic by RTECS criteria</i>; <i>Gastrointestinal:Tumors</i>; <i>Tumorigenic:Facilitates action of known carcinogen</i></p>

Barium (0% TO 29%)	7440-39-3	Multi-dose Toxicity: Ingestion/Oral-Rat TDLo • 26622 mg/kg 69 Week(s)-Continuous; Vascular:BP elevation not characterized in autonomic section; <i>Biochemical:Enzyme inhibition, induction, or change in blood or tissue levels:</i> Cytochrome oxidases (including oxidative phosphorylation); Biochemical:Metabolism (intermediary):Xanthine, purine, or nucleotides including urate
Antimony (0.3% TO 7.8%)	7440-36-0	Acute Toxicity: Ingestion/Oral-Rat LD50 • 100 mg/kg; Inhalation-Human TCLo • 10 mg/m ³ 8 Hour(s); Behavioral:Muscle weakness; <i>Gastrointestinal:Nausea or vomiting; Nutritional and Gross Metabolic:Changes in Chemistry or Temperature:Body temperature increase;</i> Inhalation-Human TCLo • 13.5 mg/m ³ 4 Hour(s); <i>Sense Organs and Special Senses:Olfaction:Other changes; Blood:Hemorrhage;</i> Tumorigen / Carcinogen: Inhalation-Rat TCLo • 50 mg/m ³ 7 Hour(s) 52 Week(s)-Intermittent; Tumorigenic:Carcinogenic by RTECS criteria; Lungs, Thorax, or Respiration:Tumors
Iron oxide (0% TO 98%)	1309-37-1	Acute Toxicity: Inhalation-Rat TCLo • 50 mg/m ³ 60 Hour(s); Behavioral:Excitement; Behavioral:Fluid intake; <i>Gastrointestinal:Hypermotility, diarrhea;</i> Inhalation-Rat TCLo • 0.8 mg/kg; <i>Lungs, Thorax, or Respiration:Emphysema; Biochemical:Enzyme inhibition, induction, or change in blood or tissue levels:Multiple enzyme effects; Biochemical:Metabolism (intermediary):Effect on inflammation or mediation of inflammation;</i> Multi-dose Toxicity: Inhalation-Rat TCLo • 500 µg/m ³ 24 Hour(s) 61 Day(s)-Continuous; <i>Brain and Coverings:Other degenerative changes; Blood:Changes in serum composition (e.g., TP, bilirubin cholesterol); Biochemical:Enzyme inhibition, induction, or change in blood or tissue levels:True cholinesterase</i>

GHS Properties	Classification
Acute toxicity	EU/CLP • Data lacking OSHA HCS 2012 • Data lacking
Skin corrosion/Irritation	EU/CLP • Data lacking OSHA HCS 2012 • Data lacking
Serious eye damage/Irritation	EU/CLP • Data lacking OSHA HCS 2012 • Data lacking
Skin sensitization	EU/CLP • Data lacking OSHA HCS 2012 • Data lacking
Respiratory sensitization	EU/CLP • Data lacking OSHA HCS 2012 • Data lacking
Aspiration Hazard	EU/CLP • Data lacking OSHA HCS 2012 • Data lacking
Carcinogenicity	EU/CLP • Data lacking OSHA HCS 2012 • Data lacking
Germ Cell Mutagenicity	EU/CLP • Data lacking OSHA HCS 2012 • Data lacking
Toxicity for Reproduction	EU/CLP • Toxic to Reproduction 1A OSHA HCS 2012 • Toxic to Reproduction 1A
STOT-SE	EU/CLP • Specific Target Organ Toxicity Single Exposure 3: Respiratory Tract Irritation OSHA HCS 2012 • Specific Target Organ Toxicity Single Exposure 3: Respiratory Tract Irritation
STOT-RE	EU/CLP • Data lacking OSHA HCS 2012 • Data lacking

Potential Health Effects

Inhalation

Acute (Immediate)

- Inhalation of dust or fumes may cause irritation to nose, throat, upper respiratory tract and lungs. Irritation may lead to bronchitis, headache, lowering of blood pressure and weakness.

Chronic (Delayed)

- No data available

Skin

- Acute (Immediate)** • May cause allergic reaction (sensitization) in susceptible individuals.
- Chronic (Delayed)** • No data available

Eye

- Acute (Immediate)** • Dust and fumes can irritate the eyes causing redness and discharge.
- Chronic (Delayed)** • No data available

Ingestion

- Acute (Immediate)** • Ingestion is not anticipated to be a likely route of exposure to this product.
- Chronic (Delayed)** • No data available

Other

- Chronic (Delayed)** • When the ammunition is fired, a small amount of particles may be generated. The particles may contain trace amounts of these harmful substances: Inhalation of high concentrations of metallic copper dusts or fumes may cause nasal irritation and/or nausea, vomiting and stomach pain.

Carcinogenic Effects

- This product is not classified a carcinogen by IARC, OSHA, NTP or EPA. However, there are some components that are carcinogens according to these agencies.

Carcinogenic Effects			
	CAS	IARC	NTP
Arsenic	7440-38-2	Group 1-Carcinogenic	Known Human Carcinogen

Reproductive Effects

- Repeated and prolonged exposure may cause reproductive effects.

11.2 Other information

- Heating above the melting point releases metallic oxides which may cause metal fume fever by inhalation. The symptoms are shivering, fever, malaise and muscular pain. Exposure to antimony can cause what are known as antimony spots which is a rash characterized by papules and pustules that resembles chicken pox.

Key to abbreviations

LD = Lethal Dose
 TC = Toxic Concentration
 TD = Toxic Dose

Section 12 - Ecological Information

12.1 Toxicity

- Material data lacking.

12.2 Persistence and degradability

- Material data lacking.

12.3 Bioaccumulative potential

- Material data lacking.

12.4 Mobility in Soil

- Material data lacking.

12.5 Results of PBT and vPvB assessment

- PBT and vPvB assessment has not been conducted for this material.

12.6 Other adverse effects

- No studies have been found.

Section 13 - Disposal Considerations

13.1 Waste treatment methods

- Product waste**
- Dispose of content and/or container in accordance with local, regional, national, and/or international regulations.
- Packaging waste**
- Dispose of content and/or container in accordance with local, regional, national, and/or international regulations.

Section 14 - Transport Information

	14.1 UN number	14.2 UN proper shipping name	14.3 Transport hazard class(es)	14.4 Packing group	14.5 Environmental hazards
DOT	UN0044	Primers, Cap Type	1.4S	II	NDA
TDG	UN0044	PRIMERS, CAP TYPE	1.4S	II	NDA
IMO/IMDG	UN0044	PRIMERS, CAP TYPE	1.4S	NDA	NDA
IATA/ICAO	UN0044	Primers, Cap Type	1.4S	NDA	NDA

14.6 Special precautions for user

- None specified.

14.7 Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

- Data lacking.

Section 15 - Regulatory Information

15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture

SARA Hazard Classifications

- Acute, Chronic, Pressure(Sudden Release of)

State Right To Know				
Component	CAS	MA	NJ	PA
2,4,6-Trinitro-1,3-benzenediol lead salt	15245-44-0	Yes	Yes	No
Antimony	7440-36-0	Yes	Yes	Yes
Arsenic	7440-38-2	Yes	Yes	Yes
Barium	7440-39-3	Yes	Yes	Yes
Copper	7440-50-8	Yes	Yes	Yes
Guanyl nitrosaminoguanilyltetrazene	109-27-3	No	No	No
Iron oxide	1309-37-1	Yes	Yes	Yes
Zinc	7440-66-6	Yes	Yes	Yes

Inventory				
Component	CAS	EU EINECS	EU ELNICS	TSCA
2,4,6-Trinitro-1,3-benzenediol lead salt	15245-44-0	Yes	No	Yes
Antimony	7440-36-0	Yes	No	Yes

Arsenic	7440-38-2	Yes	No	Yes
Barium	7440-39-3	Yes	No	Yes
Copper	7440-50-8	Yes	No	Yes
Guanyl nitrosaminoguanyltetrazene	109-27-3	Yes	No	Yes
Iron oxide	1309-37-1	Yes	No	Yes
Zinc	7440-66-6	Yes	No	Yes

Europe

Other

EU - CLP (1272/2008) - Annex VI - Table 3.2 - Classification

• 2,4,6-Trinitro-1,3-benzenediol lead salt	15245-44-0	Xn; R20/22 E; R3 R33 N; R50-53 Repr.Cat.1; R61 Repr.Cat.3; R62
• Guanyl nitrosaminoguanyltetrazene	109-27-3	Not Listed
• Barium	7440-39-3	Not Listed
• Copper	7440-50-8	Not Listed
• Iron oxide	1309-37-1	Not Listed
• Antimony	7440-36-0	Not Listed
• Arsenic	7440-38-2	T; R23/25 N; R50-53
• Zinc	7440-66-6	Not Listed

EU - CLP (1272/2008) - Annex VI - Table 3.2 - Concentration Limits

• 2,4,6-Trinitro-1,3-benzenediol lead salt	15245-44-0	Not Listed
• Guanyl nitrosaminoguanyltetrazene	109-27-3	Not Listed
• Barium	7440-39-3	Not Listed
• Copper	7440-50-8	Not Listed
• Iron oxide	1309-37-1	Not Listed
• Antimony	7440-36-0	Not Listed
• Arsenic	7440-38-2	Not Listed
• Zinc	7440-66-6	Not Listed

EU - CLP (1272/2008) - Annex VI - Table 3.2 - Labelling

• 2,4,6-Trinitro-1,3-benzenediol lead salt	15245-44-0	E T N R:61-3-20/22-33-50/53-62 S:53-45-60-61
• Guanyl nitrosaminoguanyltetrazene	109-27-3	Not Listed
• Barium	7440-39-3	Not Listed
• Copper	7440-50-8	Not Listed
• Iron oxide	1309-37-1	Not Listed
• Antimony	7440-36-0	Not Listed
• Arsenic	7440-38-2	T N R:23/25-50/53 S:(1/2)-20/21-28-45-60-61
• Zinc	7440-66-6	Not Listed

EU - CLP (1272/2008) - Annex VI - Table 3.2 - Notes - Substances and Preparations

• 2,4,6-Trinitro-1,3-benzenediol lead salt	15245-44-0	E, 1
• Guanyl nitrosaminoguanyltetrazene	109-27-3	Not Listed
• Barium	7440-39-3	Not Listed
• Copper	7440-50-8	Not Listed
• Iron oxide	1309-37-1	Not Listed
• Antimony	7440-36-0	Not Listed
• Arsenic	7440-38-2	Not Listed
• Zinc	7440-66-6	Not Listed

EU - CLP (1272/2008) - Annex VI - Table 3.2 - Safety Phrases

• 2,4,6-Trinitro-1,3-benzenediol lead salt	15245-44-0	S:53-45-60-61
• Guanyl nitrosaminoguanyltetrazene	109-27-3	Not Listed
• Barium	7440-39-3	Not Listed
• Copper	7440-50-8	Not Listed
• Iron oxide	1309-37-1	Not Listed
• Antimony	7440-36-0	Not Listed
• Arsenic	7440-38-2	S:(1/2)-20/21-28-45-60-61
• Zinc	7440-66-6	Not Listed

United States**Labor****U.S. - OSHA - Process Safety Management - Highly Hazardous Chemicals**

• 2,4,6-Trinitro-1,3-benzenediol lead salt	15245-44-0	Not Listed
• Guanyl nitrosaminoguanyltetrazene	109-27-3	Not Listed
• Barium	7440-39-3	Not Listed
• Copper	7440-50-8	Not Listed
• Iron oxide	1309-37-1	Not Listed
• Antimony	7440-36-0	Not Listed
• Arsenic	7440-38-2	Not Listed
• Zinc	7440-66-6	Not Listed

U.S. - OSHA - Specifically Regulated Chemicals

• 2,4,6-Trinitro-1,3-benzenediol lead salt	15245-44-0	Not Listed
• Guanyl nitrosaminoguanyltetrazene	109-27-3	Not Listed
• Barium	7440-39-3	Not Listed
• Copper	7440-50-8	Not Listed
• Iron oxide	1309-37-1	Not Listed
• Antimony	7440-36-0	Not Listed
• Arsenic	7440-38-2	Not Listed
• Zinc	7440-66-6	Not Listed

Environment**U.S. - CAA (Clean Air Act) - 1990 Hazardous Air Pollutants**

• 2,4,6-Trinitro-1,3-benzenediol lead salt	15245-44-0	Not Listed
• Guanyl nitrosaminoguanyltetrazene	109-27-3	Not Listed
• Barium	7440-39-3	Not Listed
• Copper	7440-50-8	Not Listed
• Iron oxide	1309-37-1	Not Listed
• Antimony	7440-36-0	Not Listed
• Arsenic	7440-38-2	Not Listed
• Zinc	7440-66-6	Not Listed

U.S. - CERCLA/SARA - Hazardous Substances and their Reportable Quantities

• 2,4,6-Trinitro-1,3-benzenediol lead salt	15245-44-0	Not Listed
• Guanyl nitrosaminoguanyltetrazene	109-27-3	Not Listed
• Barium	7440-39-3	Not Listed
• Copper	7440-50-8	5000 lb final RQ (no reporting of releases of this hazardous substance is required if the diameter of the pieces of the solid metal released is >100 µm); 2270 kg final RQ (no reporting of releases of this

• Iron oxide	1309-37-1	hazardous substance is required if the diameter of the pieces of the solid metal released is >100 µm) Not Listed 5000 lb final RQ (no reporting of releases of this hazardous substance is required if the diameter of the pieces of the solid metal released is >100 µm); 2270 kg final RQ (no reporting of releases of this hazardous substance is required if the diameter of the pieces of the solid metal released is >100 µm)
• Antimony	7440-36-0	1 lb final RQ (no reporting of releases of this hazardous substance is required if the diameter of the pieces of the solid metal released is >100 µm); 0.454 kg final RQ (no reporting of releases of this hazardous substance is required if the diameter of the pieces of the solid metal released is >100 µm)
• Arsenic	7440-38-2	454 kg final RQ (no reporting of releases of this hazardous substance is required if the diameter of the pieces of the solid metal released is >100 µm); 1000 lb final RQ (no reporting of releases of this hazardous substance is required if the diameter of the pieces of the solid metal released is >100 µm)
• Zinc	7440-66-6	
U.S. - CERCLA/SARA - Radionuclides and Their Reportable Quantities		
• 2,4,6-Trinitro-1,3-benzenediol lead salt	15245-44-0	Not Listed
• Guanyl nitrosaminoguanyltetrazene	109-27-3	Not Listed
• Barium	7440-39-3	Not Listed
• Copper	7440-50-8	Not Listed
• Iron oxide	1309-37-1	Not Listed
• Antimony	7440-36-0	Not Listed
• Arsenic	7440-38-2	Not Listed
• Zinc	7440-66-6	Not Listed
U.S. - CERCLA/SARA - Section 302 Extremely Hazardous Substances EPCRA RQs		
• 2,4,6-Trinitro-1,3-benzenediol lead salt	15245-44-0	Not Listed
• Guanyl nitrosaminoguanyltetrazene	109-27-3	Not Listed
• Barium	7440-39-3	Not Listed
• Copper	7440-50-8	Not Listed
• Iron oxide	1309-37-1	Not Listed
• Antimony	7440-36-0	Not Listed
• Arsenic	7440-38-2	Not Listed
• Zinc	7440-66-6	Not Listed

U.S. - CERCLA/SARA - Section 302 Extremely Hazardous Substances TPQs

• 2,4,6-Trinitro-1,3-benzenediol lead salt	15245-44-0	Not Listed
• Guanyl nitrosaminoguanyltetrazene	109-27-3	Not Listed
• Barium	7440-39-3	Not Listed
• Copper	7440-50-8	Not Listed
• Iron oxide	1309-37-1	Not Listed
• Antimony	7440-36-0	Not Listed
• Arsenic	7440-38-2	Not Listed
• Zinc	7440-66-6	Not Listed

U.S. - CERCLA/SARA - Section 313 - Emission Reporting

• 2,4,6-Trinitro-1,3-benzenediol lead salt	15245-44-0	Not Listed
• Guanyl nitrosaminoguanyltetrazene	109-27-3	Not Listed
• Barium	7440-39-3	1.0 % de minimis concentration
• Copper	7440-50-8	1.0 % de minimis concentration
• Iron oxide	1309-37-1	Not Listed
• Antimony	7440-36-0	1.0 % de minimis concentration
• Arsenic	7440-38-2	0.1 % de minimis concentration
• Zinc	7440-66-6	1.0 % de minimis concentration (dust or fume only)

U.S. - CERCLA/SARA - Section 313 - PBT Chemical Listing

• 2,4,6-Trinitro-1,3-benzenediol lead salt	15245-44-0	Not Listed
• Guanyl nitrosaminoguanyltetrazene	109-27-3	Not Listed
• Barium	7440-39-3	Not Listed
• Copper	7440-50-8	Not Listed
• Iron oxide	1309-37-1	Not Listed
• Antimony	7440-36-0	Not Listed
• Arsenic	7440-38-2	Not Listed
• Zinc	7440-66-6	Not Listed

U.S. - RCRA (Resource Conservation & Recovery Act) - Basis for Listing - Appendix VII

• 2,4,6-Trinitro-1,3-benzenediol lead salt	15245-44-0	Not Listed
• Guanyl nitrosaminoguanyltetrazene	109-27-3	Not Listed
• Barium	7440-39-3	Included in waste stream: F039
• Copper	7440-50-8	Not Listed
• Iron oxide	1309-37-1	Not Listed
• Antimony	7440-36-0	Included in waste streams: F039, K021, K161, K177
• Arsenic	7440-38-2	Included in waste streams: F032, F034, F035, F039, K031, K060, K084, K101, K102, K161, K171, K172, K176
• Zinc	7440-66-6	Not Listed

U.S. - RCRA (Resource Conservation & Recovery Act) - Constituents for Detection Monitoring

• 2,4,6-Trinitro-1,3-benzenediol lead salt	15245-44-0	Not Listed
• Guanyl nitrosaminoguanyltetrazene	109-27-3	Not Listed
• Barium	7440-39-3	(total)

• Copper	7440-50-8	(total)
• Iron oxide	1309-37-1	Not Listed
• Antimony	7440-36-0	(total)
• Arsenic	7440-38-2	(total)
• Zinc	7440-66-6	(total)

U.S. - RCRA (Resource Conservation & Recovery Act) - D Series Wastes - Max Conc of Contaminants for the Tox Characteristic

• 2,4,6-Trinitro-1,3-benzenediol lead salt	15245-44-0	Not Listed
• Guanyl nitrosaminoguanyltetrazene	109-27-3	Not Listed
• Barium	7440-39-3	100.0 mg/L regulatory level
• Copper	7440-50-8	Not Listed
• Iron oxide	1309-37-1	Not Listed
• Antimony	7440-36-0	Not Listed
• Arsenic	7440-38-2	5.0 mg/L regulatory level
• Zinc	7440-66-6	Not Listed

U.S. - RCRA (Resource Conservation & Recovery Act) - Hazardous Constituents - Appendix VIII to 40 CFR 261

• 2,4,6-Trinitro-1,3-benzenediol lead salt	15245-44-0	Not Listed
• Guanyl nitrosaminoguanyltetrazene	109-27-3	Not Listed
• Barium	7440-39-3	hazardous constituent - no waste number
• Copper	7440-50-8	Not Listed
• Iron oxide	1309-37-1	Not Listed
• Antimony	7440-36-0	hazardous constituent - no waste number
• Arsenic	7440-38-2	hazardous constituent - no waste number
• Zinc	7440-66-6	Not Listed

U.S. - RCRA (Resource Conservation & Recovery Act) - List for Hazardous Constituents

• 2,4,6-Trinitro-1,3-benzenediol lead salt	15245-44-0	Not Listed
• Guanyl nitrosaminoguanyltetrazene	109-27-3	Not Listed
• Barium	7440-39-3	(total)
• Copper	7440-50-8	(total)
• Iron oxide	1309-37-1	Not Listed
• Antimony	7440-36-0	(total)
• Arsenic	7440-38-2	(total)
• Zinc	7440-66-6	(total)

U.S. - RCRA (Resource Conservation & Recovery Act) - Phase 4 LDR Rule - Universal Treatment Standards

• 2,4,6-Trinitro-1,3-benzenediol lead salt	15245-44-0	Not Listed
• Guanyl nitrosaminoguanyltetrazene	109-27-3	Not Listed
• Barium	7440-39-3	1.2 mg/L (wastewater); 21 mg/L TCLP (nonwastewater)
• Copper	7440-50-8	Not Listed
• Iron oxide	1309-37-1	Not Listed
• Antimony	7440-36-0	1.9 mg/L (wastewater); 1.15 mg/L TCLP (nonwastewater)
• Arsenic	7440-38-2	1.4 mg/L (wastewater); 5.0 mg/L TCLP (nonwastewater)
• Zinc	7440-66-6	2.61 mg/L (wastewater); 4.3 mg/L TCLP (nonwastewater)

U.S. - RCRA (Resource Conservation & Recovery Act) - TSD Facilities Ground Water Monitoring

• 2,4,6-Trinitro-1,3-benzenediol lead salt	15245-44-0	Not Listed
• Guanyl nitrosaminoguanyltetrazene	109-27-3	Not Listed

• Barium	7440-39-3	(total)
• Copper	7440-50-8	(total)
• Iron oxide	1309-37-1	Not Listed
• Antimony	7440-36-0	(total)
• Arsenic	7440-38-2	(total)
• Zinc	7440-66-6	(total)

United States - California

Environment

U.S. - California - Proposition 65 - Carcinogens List

• 2,4,6-Trinitro-1,3-benzenediol lead salt	15245-44-0	Not Listed
• Guanyl nitrosaminoguanyltetrazene	109-27-3	Not Listed
• Barium	7440-39-3	Not Listed
• Copper	7440-50-8	Not Listed
• Iron oxide	1309-37-1	Not Listed
• Antimony	7440-36-0	Not Listed
• Arsenic	7440-38-2	Not Listed
• Zinc	7440-66-6	Not Listed

U.S. - California - Proposition 65 - Developmental Toxicity

• 2,4,6-Trinitro-1,3-benzenediol lead salt	15245-44-0	Not Listed
• Guanyl nitrosaminoguanyltetrazene	109-27-3	Not Listed
• Barium	7440-39-3	Not Listed
• Copper	7440-50-8	Not Listed
• Iron oxide	1309-37-1	Not Listed
• Antimony	7440-36-0	Not Listed
• Arsenic	7440-38-2	Not Listed
• Zinc	7440-66-6	Not Listed

U.S. - California - Proposition 65 - Maximum Allowable Dose Levels (MADL)

• 2,4,6-Trinitro-1,3-benzenediol lead salt	15245-44-0	Not Listed
• Guanyl nitrosaminoguanyltetrazene	109-27-3	Not Listed
• Barium	7440-39-3	Not Listed
• Copper	7440-50-8	Not Listed
• Iron oxide	1309-37-1	Not Listed
• Antimony	7440-36-0	Not Listed
• Arsenic	7440-38-2	Not Listed
• Zinc	7440-66-6	Not Listed

U.S. - California - Proposition 65 - No Significant Risk Levels (NSRL)

• 2,4,6-Trinitro-1,3-benzenediol lead salt	15245-44-0	Not Listed
• Guanyl nitrosaminoguanyltetrazene	109-27-3	Not Listed
• Barium	7440-39-3	Not Listed
• Copper	7440-50-8	Not Listed
• Iron oxide	1309-37-1	Not Listed
• Antimony	7440-36-0	Not Listed
• Arsenic	7440-38-2	0.06 µg/day NSRL (inhalation); 10 µg/day NSRL (except inhalation)
• Zinc	7440-66-6	Not Listed

U.S. - California - Proposition 65 - Reproductive Toxicity - Female

• 2,4,6-Trinitro-1,3-benzenediol lead salt	15245-44-0	Not Listed
• Guanyl nitrosaminoguanyltetrazene	109-27-3	Not Listed

• Barium	7440-39-3	Not Listed
• Copper	7440-50-8	Not Listed
• Iron oxide	1309-37-1	Not Listed
• Antimony	7440-36-0	Not Listed
• Arsenic	7440-38-2	Not Listed
• Zinc	7440-66-6	Not Listed

U.S. - California - Proposition 65 - Reproductive Toxicity - Male

• 2,4,6-Trinitro-1,3-benzenediol lead salt	15245-44-0	Not Listed
• Guanyl nitrosaminoguanilyltetrazene	109-27-3	Not Listed
• Barium	7440-39-3	Not Listed
• Copper	7440-50-8	Not Listed
• Iron oxide	1309-37-1	Not Listed
• Antimony	7440-36-0	Not Listed
• Arsenic	7440-38-2	Not Listed
• Zinc	7440-66-6	Not Listed

United States - Pennsylvania**Labor****U.S. - Pennsylvania - RTK (Right to Know) - Environmental Hazard List**

• 2,4,6-Trinitro-1,3-benzenediol lead salt	15245-44-0	Not Listed
• Guanyl nitrosaminoguanilyltetrazene	109-27-3	Not Listed
• Barium	7440-39-3	
• Copper	7440-50-8	(dust and fume)
• Iron oxide	1309-37-1	Not Listed
• Antimony	7440-36-0	
• Arsenic	7440-38-2	(inorganic)
• Zinc	7440-66-6	

U.S. - Pennsylvania - RTK (Right to Know) - Special Hazardous Substances

• 2,4,6-Trinitro-1,3-benzenediol lead salt	15245-44-0	Not Listed
• Guanyl nitrosaminoguanilyltetrazene	109-27-3	Not Listed
• Barium	7440-39-3	Not Listed
• Copper	7440-50-8	Not Listed
• Iron oxide	1309-37-1	Not Listed
• Antimony	7440-36-0	Not Listed
• Arsenic	7440-38-2	
• Zinc	7440-66-6	Not Listed

15.2 Chemical Safety Assessment

- No Chemical Safety Assessment has been carried out.

Section 16 - Other Information**Relevant Phrases (code & full text)**

- H201 - Explosive; mass explosion hazard
- H301 - Toxic if swallowed
- H302 - Harmful if swallowed
- H332 - Harmful if inhaled
- H361d - Suspected of damaging the unborn child.
- H373 - May cause damage to organs through prolonged or repeated exposure.
- H400 - Very toxic to aquatic life
- H410 - Very toxic to aquatic life with long lasting effects

H411 - Toxic to aquatic life with long lasting effects

Revision Date

- No data available

Preparation Date

- 25/October/2010

Disclaimer/Statement of Liability

- The information contained in this Safety Data Sheet is provided to all individuals who are or will be exposed to this product through use, handling, storage or transport. Remington believes, yet makes no warranty, that all information contained in this document is current as of the date of publication.

Key to abbreviations

NDA = No Data Available